

Work Order ID 81336

81336

Page 1

March-13-12 1:32:22 PM

Item ID: D407-558-045

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 13/03/2012 Start Qty: 2.00 *2*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 2.00 *2*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

100	DOCUMENT CONTROL	0.00							
-----	------------------	------	--	--	--	--	--	--	--

100

DC
Document Control

Memo
Photocopy bluefile and type labels as per PPP D407-558-045 and DS1 9436
CHG002

ML 12/04/05

110	Small Fab	0.00							
-----	-----------	------	--	--	--	--	--	--	--

110

Small Fab

Memo
Assemble as per Dwg D206-558

② FF 12-04-03

120	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--

120

QC
Quality Control

Memo

8/2/04

④2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 13/03/2012 Start Qty: 2.00 *2*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 2.00 *2*

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
125	Pick Kit	0.00							
125						2			12/04/10 JB
Packaging	Memo	0.00							
Packaging									
130	QC4- 100% Inspect kits for completeness	0.00							
130									
QC	Memo	0.00							
Quality Control									
140		0.00							
140	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D407-558-045 and DSI 9436								
	Location: 42								
	PPP Rev: C								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID: D407-558-045

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N900040100

Setup Start *NS1*

Revision ID:

Item Name: Single Cargo Mirror Assembly, 6 inch Round

Stop *NS2*

Start Date: 13/03/2012 Start Qty: 2.00 *2*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 2.00 *2*

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.
Code Qty Qty Number Stamp

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.00

Quality Control

MLJ 12/04/10

12-04-10

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

March-13-12 1:32:31 PM

81336

D407-558-045

Required Qty: 2.00

Comments: IPP Rev:A 09-01-15 new issue DD verified by:ec IPP Rev:B
10.06.17 added grommet DD verf:EC IPP REV:C 11.01.19 AS
PER chg002 DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS35489-67		Purchased	No		#125		Each	12.0000	1	2			
<div>*MS35489-67*</div> <div>GROMMET</div> <div>111193</div> <div>Location</div> <div>ST295</div> <div>111193</div> <div>Loc Qty</div> <div>12</div> <div>12</div> <div>Loc Code</div> <div>2</div> <div>**</div> <div>8</div> <div>② FF 12/04/03</div>													
AN960JD10	NAS1149D0363J	Purchased	No			110	Each	0.0000	4	8			
<div>*AN960JD10*</div> <div>Washer</div> <div>120644</div> <div>Location</div> <div>ST295</div> <div>111193</div> <div>Loc Qty</div> <div>12</div> <div>12</div> <div>Loc Code</div> <div>2</div> <div>**</div> <div>8</div> <div>② FF 12-04-03</div>													
D2011-101		Manufactured	No			110	Each	61.0000	1	2			
<div>*D2011-101*</div> <div>6" Mirror</div> <div>Location</div> <div>ST226</div> <div>70729</div> <div>75983</div> <div>79943</div> <div>Loc Qty</div> <div>61</div> <div>2</div> <div>9</div> <div>50</div> <div>Loc Code</div> <div>2</div> <div>**</div> <div>2</div> <div>② FF 12-04-03</div>													
D2052		Manufactured	No			110	Each	3.0000	2	4			
<div>*D2052*</div> <div>Mounting Bracket</div> <div>Location</div> <div>GA</div> <div>73052</div> <div>Loc Qty</div> <div>3</div> <div>3</div> <div>Loc Code</div> <div>3</div> <div>**</div> <div>2</div> <div>② FF 12-04-03</div>													

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-13-12 1:32:31 PM

Work Order ID: 81336

81336

Parent Item: D407-558-045

D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 2.00

Required Qty: 2.00

D2054 Manufactured No

110 Each 12.0000 2 4

D2054

Bushing

**

② FF 12-04-03

Location

Loc Qty

Loc Code

GA

12

67784

12

4

D2055 Manufactured No

110 Each 4.0000 1 2

D2055

Clamp

**

② FF 12-04-03

Location

Loc Qty

Loc Code

GA

4

71890

4

2

D2056 Manufactured No

110 Each 17.0000 1 2

D2056

Bell Crank

**

② FF FF 12-04-03

Location

Loc Qty

Loc Code

GA

17

71102

2

71889

15

2

D2057 Manufactured No

110 Each 31.0000 1 2

D2057

Plug

**

② FF 12-04-03

Location

Loc Qty

Loc Code

GA

31

71888

11

75070

20

2

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 81336

81336

Parent Item: D407-558-045

D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 2.00

Required Qty: 2.00

D2065 Manufactured No

110 Each 5.0000 1 2

D2065

Arm

**

2 (2) FF 12-04-03

Location

Loc Qty

Loc Code

ST229

5

73053

5

2

MS21042L3 Purchased No

110 Each 3,192.000 2 4

MS21042L3

Nut

**

(2) FF 12-04-03

Location

Loc Qty

Loc Code

ST300

3192

117441

16

117885

32

118451

5

118927

3

119017

2956

4

119075

180

MS27039-1-18 Purchased No

110 Each 44.0000 2 4

MS27039-1-18

Screw

**

(2) FF 12-04-03

Location

Loc Qty

Loc Code

ST291

44

115589

19

120308

25

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 81336

81336

Parent Item: D407-558-045

D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 2.00

Required Qty: 2.00

AN3-4A Purchased No

125 Each

584.0000

4 8

AN3-4A

Bolt

**

JB

JB

Location

Loc Qty

Loc Code

ST350 1147817 584
104291 4
104625 300
120308 80
120770 200

104625

AN526-1032R9 Purchased No

125 Each

48.0000

4 8

AN526-1032R9

Screw

**

JB

JB

Location

Loc Qty

Loc Code

ST348 48
347 114382 4
116900 4
117395 40

117395

AN960JD10L NAS1149D0332J Purchased No

125 Each

0.0000

6 12

***AN960JD10L ***

Washer

**

120644 JB

JB

D2053 Manufactured No

125 Each

17.0000

1 2

D2053

Mounting Bracket

**

JB

12/04/12

Location

Loc Qty

Loc Code

ST004 17
58395 1
71595 16

71595

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-13-12 1:32:31 PM

Page 5

Work Order ID: 81336

81336

Parent Item: D407-558-045

D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 2.00

Required Qty: 2.00

D2067 Manufactured No

125 Each

25.0000

1 2 ✓

**

D2067

Connector

Location

Loc Qty

Loc Code

ST004

25

~~70066~~

25

7.0000

1 2 ✓

**

D2071-3

Manufactured No

125 Each

D2071-3

Cable

Location

Loc Qty

Loc Code

ST222

7

~~64745~~

1

~~73054~~

6

3.0000

1 2 ✓

**

D3778-1

Manufactured No

125 Each

D3778-1

Bracket

Location

Loc Qty

Loc Code

ST228

3

~~71205~~

3

3,192.000

1 2 ✓

**

MS21042L3

Purchased No

125 Each

MS21042L3

Nut

Location

Loc Qty

Loc Code

ST300

3192

117441

16

117885

32

118451

5

118927

3

~~119017~~

2956

119075

180

119017

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-13-12 1:32:31 PM

Page 6

Work Order ID: 81336

81336

Parent Item: D407-558-045

D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 2.00

Required Qty: 2.00

MS21919-DG5

Purchased

No

125

Each

68.0000

12

4

**

JB

12/04/10

MS21919-DG5

Clamp

Location

Loc Qty

Loc Code

ST306

68

119638

18

120498

25

120731

25

~~118240~~

120498

7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

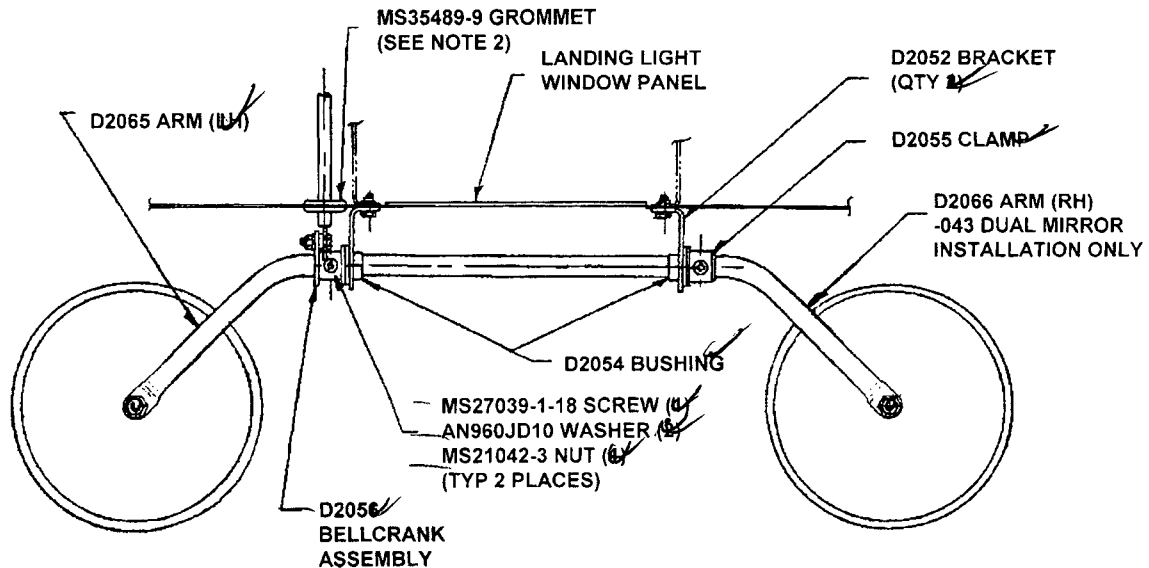


Figure 25.2 – View A: Looking Aft.
(D206-558-043 Mirror Shown)

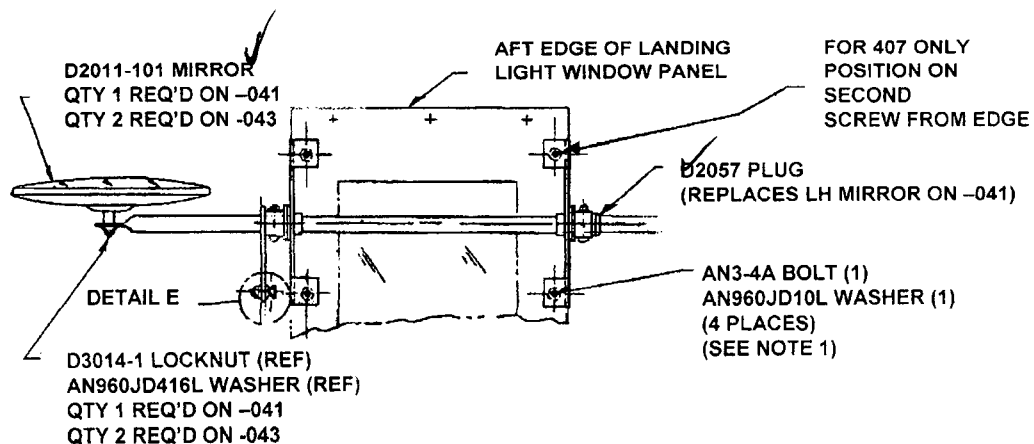


Figure 25.3 – View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)

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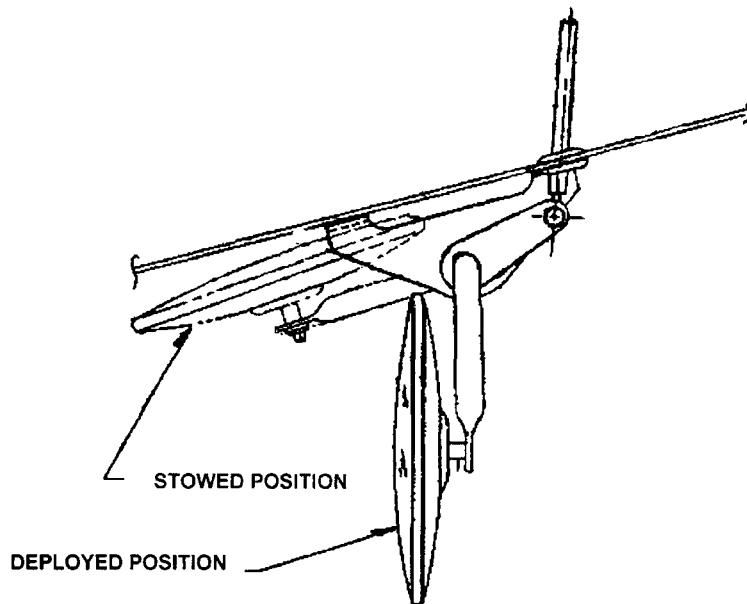


Figure 25.4 – Detail D: Looking from Side on Mirror Installation
(D206-558-041/-043 Mirror Shown)

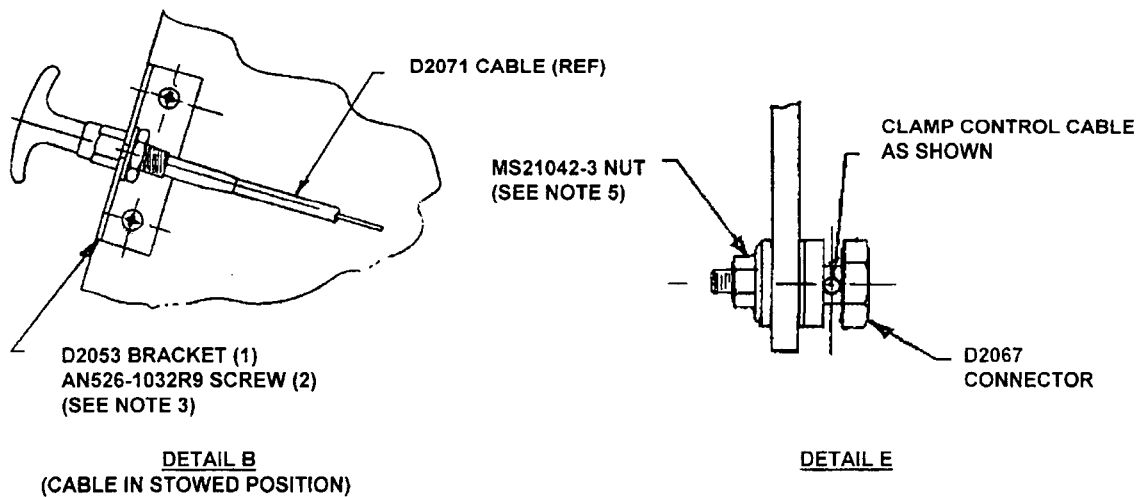


Figure 25.5 – Details B and E on Mirror Installation
(D206-558-041/-043 Mirror Shown)

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FROM THIS POINT FORWARD, CUSTOMERS SHOULD ORDER D407-558-045/-047 IN LIEU OF D206-558-041/-043 WHEN PROCURING SINGLE/DUAL MIRRORS FOR BHT 407 MODELS. AMEND SECTIONS 4.0 AND 5.0 OF INSTALLATION INSTRUCTIONS D206-558 REV. C OR EARLIER AND 25.3 AND 25.4 OF ICA-D206-558 REV. 0 AS FOLLOWS:

REFERENCE ONLY

4.0 WEIGHT AND BALANCE (D206-558 REV. C OR EARLIER)
25.3 WEIGHT AND BALANCE (ICA-D206-558 REV. 0)

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041	2.4 lb	+5.0 in	+12.0 in-lb	+14.8 in	+35.5 in-lb
Bell 206A/B/L/L1/L3/L4	1.09 Kg	+0.13 m	+0.14 m-Kg	+0.38 m	+0.41 m-Kg
D206-558-043	3.0 lb	0.0 in	0.0 in-lb	+14.8 in	+44.4 in-lb
Bell 206A/B/L/L1/L3/L4	1.36 Kg	0.0 m	0.0 m-Kg	+0.38 m	+0.52 m-Kg
D407-558-045	2.4 lb	+5.0 in	+12.0 in-lb	+14.8 in	+35.5 in-lb
Bell 407	1.09 Kg	+0.13 m	+0.14 m-Kg	+0.38 m	+0.41 m-Kg
D407-558-047	3.0 lb	0.0 in	0.0 in-lb	+14.8 in	+44.4 in-lb
Bell 407	1.36 Kg	0.0 m	0.0 m-Kg	+0.38 m	+0.52 m-Kg

5.0 PARTS LIST (D206-558 REV. C OR EARLIER)
25.4 PARTS LIST (ICA-D206-558 REV. 0)

Qty -041	Qty -043	Qty -045	Qty -047	Part Number	Description
X				D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X			D206-558-043	DUAL CARGO MIRROR ASSEMBLY
		X		D407-558-045	SINGLE CARGO MIRROR ASSEMBLY
			X	D407-558-047	DUAL CARGO MIRROR ASSEMBLY
1	2	2	2	D2011-101	MIRROR ASSEMBLY
2	2	2	2	D2052	BRACKET
1	1	1	1	D2053	BRACKET
2	2	2	2	D2054	BUSHING
1	1	1	1	D2055	CLAMP
1	1	1	1	D2056	BELLCRANK ASSEMBLY
1		1		D2057	PLUG
1		1		D2065	ARM
	1		1	D2066	ARM
1	1	1	1	D2067	CONNECTOR
1	1			D2071	CABLE ASSEMBLY
		1	1	D2071-3	CABLE ASSEMBLY
1	2	1	2	D3014-1	* LOCKNUT
1	1	1	1	D3778-1	BRACKET
4	4	4	4	AN3-4A	BOLT
4	4	4	4	AN526-1032R9	SCREW
1	2	1	2	AN960JD416L	* WASHER
4	4	4	4	AN960JD10	WASHER
6	6	6	6	AN960JD10L	WASHER
3	3	3	3	MS21042-3	*NUT (or MS21042L3) (2)
2	2	2	2	MS21919DG5	CLAMP
2	2	2	2	MS27039-1-18	SCREW
1	1			MS35489-9	GROMMET
		1	1	MS35489-67	GROMMET

* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 08.12.04
CERT. NO.: SH92-17
ISSUE NO.: 7

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	DSI 9436	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	CABLE CHANGE	NTS
DATE	08.12.04	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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Part Number D407-558-045
Description SINGLE CARGO MIRROR ASSY

[illegible]